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Notice of Allowability

Application No.

10/023,120

Examiner

Michael J. Moore, Jr.

Applicant(s)

MANGOLD ET AL.

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the Amendment filed 3/19/07.
2. ☒ The allowed claim(s) is/are 1-9 and 11-18 (renumbered 1-17, respectively).
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

Allowable Subject Matter

1. Claims **1-9 and 11-18** (*renumbered 1-17, respectively*) are allowed.
2. The following is an examiner's statement of reasons for allowance:

Regarding claim **1**, *Sherman* (U.S. 7,031,274) teaches a method for enabling interoperability between IEEE 802.11 stations (first stations) and HIPERLAN/2 stations (second stations) where 802.11 stations are prevented (inhibited) from transmitting during time periods allocated to HIPERLAN/2 stations.

Texerman et al. (U.S. 2004/0141522) teaches a similar method of interworking between 802.11 (first stations) and H/2 stations (second stations) where time slices are broadcast by an arbitrator entity of an access point that indicate the time intervals in which each set of mobile terminals (802.11 and H/2 stations) may transmit.

Sherman, *Texerman et al.* as well as the other prior art of record fail to teach determining whether the predetermined time interval specified in the control frame is longer than an interval of time following receipt of a last frame from one of the first stations and before a scheduled start of a set of next frames from at least one of the second stations, and if so, waiting for a point interframe spacing interval after which the next frames from the second stations are permitted to transmit to the AP over the wireless channel and also inhibiting transmission from the plurality of first stations to the AP.

Regarding claims **2-8**, these claims are further limiting to claim **1** and are thus also allowable over the prior art of record.

Regarding claim **9**, *Sherman* (U.S. 7,031,274) teaches a method for enabling interoperability between IEEE 802.11 stations (first stations) and HIPERLAN/2 stations (second stations) where 802.11 stations are prevented (inhibited) from transmitting during time periods allocated to HIPERLAN/2 stations.

Texerman et al. (U.S. 2004/0141522) teaches a similar method of interworking between 802.11 (first stations) and H/2 stations (second stations) where time slices are broadcast by an arbitrator entity of an access point that indicate the time intervals in which each set of mobile terminals (802.11 and H/2 stations) may transmit.

Sherman, Texerman et al. as well as the other prior art of record fail to teach determining whether the predetermined time interval specified in the control frame is longer than an interval of time following receipt of a last frame from one of the first stations and before a scheduled start of a set of next frames from at least one of the second stations, and if so, determining a range of time $[t_1, t_2]$ to control the wireless channel by the AP, and controlling the wireless channel within the time range to permit the plurality of second stations to transmit a data packet, the data packet including a shorter duration than the predetermined time interval specified in the control frame.

Regarding claims **11-18**, these claims are further limiting to claim **9** and are thus also allowable over the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Jayaraman et al. (U.S. 6,963,549), Sherman (U.S. 7,046,690), and Liang (U.S. 7,099,671) are additional references considered pertinent to this application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Moore, Jr. whose telephone number is (571) 272-3168. The examiner can normally be reached on Monday-Friday (7:30am - 4:00pm). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wing F. Chan can be reached on (571) 272-7493. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Michael J. Moore, Jr.
Examiner
Art Unit 2616


5/17/07
WING CHAN
SUPERVISORY PATENT EXAMINER